

Date: Thursday, 2/23/2006 10:21:20 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WEARPAD
Job Number	: 25904		
Estimate Number	: 10313		
P.O. Number	: N/A	Part Number	: D26483
This Issue	: 2/23/2006 S.O. No. : N/A	Drawing Number	: D2648 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: D
Previous Run	: 24843	Material	: N/A
Written By	: <u>SEE COMMENT BELOW</u>	Due Date	: 3/20/2006 Qty: 400 Um: Each
Checked & Approved By	: <u>06.02.23</u>		
Comment	: Est: E 02.09.18 Re-format; Incorporated D2648-1 KJ/RF		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 00000659

Email or ship DXF file to vendor

Make per Drawing D2648-1

Material release note required

06.02.24

2.0	D26483F	Wearpad
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 400.0000 Each(s)  
 WEARPAD

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive &amp; Inspect For Transit Damage

Ensure material release note is attached

06.10.31.09 (40#)

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

06.03.15 404

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL &amp; MEDIUM FAB RESOURCE 1

Deburr if necessary

N/A SB 06/03/16 404

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 2/23/2006 10:21:20 AM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPAD

Job Number: 25904

Part Number: D26483

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1-Form as per Dwg D2648 on CNC brake using Jigs DT 8261 and DT 8326.

2-Identify as D2648-3

SB 06/03/16

404

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Qty Description

Batch

A/R560Hardcoat

M100452 & M100299

M.F

Hermine M.

1-Weld as per Dwg D2648 using Jig DT 8210

2-Remove any weld that penetrated through Wearpadif necessary

06-04-07

404

8.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

06/04/07 (402)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06-04-07

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

DL 06/04/16

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

06 04 17

(402)

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: FP 16

DL 06/04/17

(402)

13.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SD 06/04/19

(402)



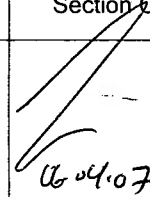

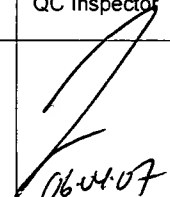
DL 06/04/19

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/04/20

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/04/07	7.0	2 scrapped. Weld burnt through the wear pad beyond repair. 1st timers :-)		Scrap and destroy	 06/04/07	 06.04.07		 06.04.07

NOTE: Date & initial all entries

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

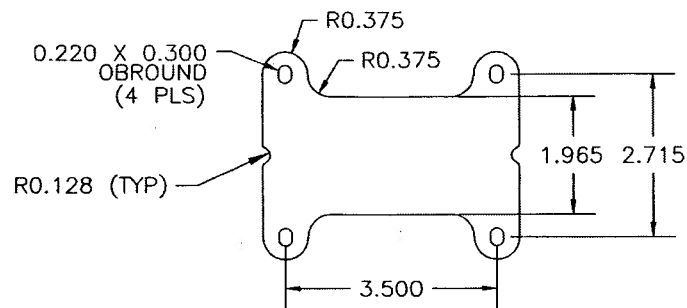
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

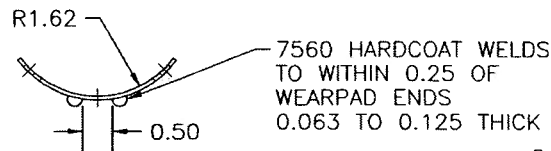
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

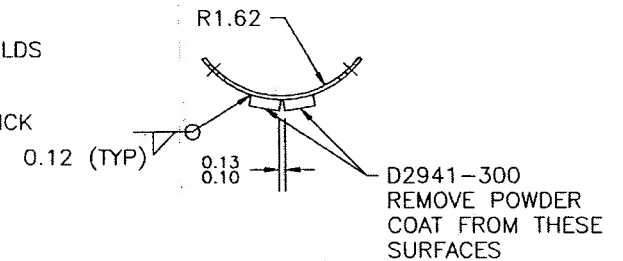
# D2648-1 FLAT PATTERN



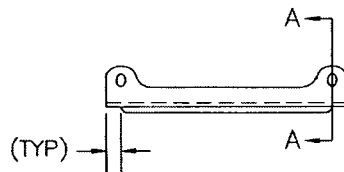
## SECTION A-A



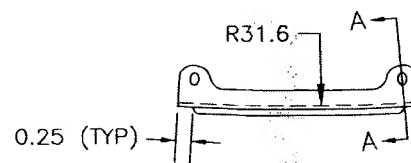
## SECTION B-B



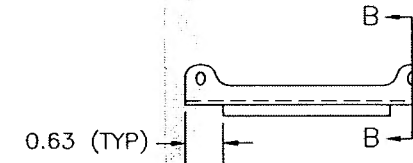
## D2648-3 LONGITUDINAL BEND (MADE FROM D2648-1)



## D2648-5 LONGITUDINAL BEND (MADE FROM D2648-1)



## D2648-7 LONGITUDINAL BEND (MADE FROM D2648-1)



RELEASED  
99.12.20 DS



NO. 25904  
WORK ORDER  
WITHOUT NOTICE  
ENGINEERING  
CONTROLLED  
SUBJECT TO AMENDMENT

BREAK ALL SHARP CORNERS 0.063 MAX  
MATERIAL: 16 GAUGE AISI 1010-1025 OR ASTM A36/A366 STEEL (0.063 THICK)  
FINISH: POWDER COAT GREY (REF. 4.3.5.5) PER DART QSI 005  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
ALL DIMENSIONS ARE IN INCHES

D	99.11.17	ADDED D2648-7
C	97.06.26	R31.6 WAS R19.6
B	97.05.30	ENLARGE OBROUND, 0.375 WAS 0.250
A	97.03.25	NEW ISSUE
DESIGN	DRAWN BY	DART DART AEROSPACE USA, INC. BELLEVUE, WA
CHECKED	APPROVED	DRAWING NO. D2648
DATE	TITLE	WEARPAD
99.11.17		



New Zealand Steel Limited  
Glenbrook, South Auckland  
Postal: Private Bag 92121, Auckland, New Zealand  
Telephones: (09) 375 8999 / 375 8111 Auckland  
(09) 235 8089 / 235 3535 Wairuku  
Fax: (09) 375 8959

# TEST CERTIFICATE

Ref: 5337/23317

CUSTOMER	Wilkinson	P50505DI002	SPECIFICATION	ASTMA1008 CS Type A	CERTIFICATE No	TC115838
CUSTOMER O/N	90-21N-742		PRODUCT	CRA WIDE COIL	PAGE	1 of 1
MILL O/N	486968		DIMENSIONS	8.033" x 48" x Coil	DATE	02 August 2005

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT															MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)							
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ( )	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH
		x100				x1000											x10000	x100	180°			G.L.=	HRB	( )
R9-464817-00	844863	6	TR	20	7	17	15	23	14	2	3	1	3					Good				45		2618
R9-464818-00	844863	6	TR	20	7	17	15	23	14	2	3	1	3					Good				45		2664
R9-464819-00	779675	6	TR	20	14	16	11	21	13	2	3	1	3					Good				49		2618
R9-464820-00	779675	6	TR	20	14	16	11	21	13	2	3	1	3					Good				49		2825
R9-464821-00	779674	6	TR	21	13	17	13	22	17	2	3	1	3					Good				50		1923
R9-464822-00	779674	6	TR	21	13	17	13	22	17	2	3	1	3					Good				50		1978

P.0659

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	(C)=5mm x 5mm	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=r0 (C)=r45	(A)=10mm x 10mm	(D)=2.5mm x 10mm	(A)=C+Mn/8
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.85 r'So (F)=8"	(B)=r90 (D)=(r0+r90+2r45)/4	(B)=7.5mm x 10mm	(E)=5mm x 10mm	(B)=C+Mn/8+(Cr+V+Mo)/5+(Cu+Ni)/15
					(C)=C+Mn/6+Si/24
					(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED  
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED

*Sanish Misra*  
QC METALLURGIST